



PATENT
Attorney Docket No. CNF-007

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S): Fike et al.
SERIAL NO.: 10/666,914 GROUP NO.: 2874
FILING DATE: September 19, 2003 EXAMINER: Not yet assigned
TITLE: Mode Converter Including Tapered Waveguide for Optically Coupling
Photonic Devices

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with the provisions of 37 C.F.R. 1.97 and 1.98, Applicants hereby make of record the patents and publications listed on the accompanying Form PTO-1449, and other information contained herein, for consideration by the Examiner in connection with the examination of the above-identified patent application. In accordance with the U.S. Patent Office's partial waiver of the requirement under 37 C.F.R. 1.98(a)(2)(i), only copies of the foreign patent documents and non-patent publications are enclosed.

REMARKS

In accordance with the provisions of 37 C.F.R. 1.97, this statement is being filed (CHECK ONE):

- ☒ (1) within three (3) months of the **filing date** of a national application other than a continued prosecution application under 37 C.F.R. 1.53(d), or within three (3) months of the **date of entry of the national stage** as set forth in 37 C.F.R. 1.491 in an international application, or before the mailing of the **first Office action** on the merits, or before the mailing of a **first Office action** after the filing of a request for continued examination under 37 C.F.R. 1.114; or
- ☐ (2) after the period defined in (1) but before the mailing date of a **final action** or a **notice of allowance** under 37 C.F.R. 1.311, and
- ☐ the requisite Statement is below, **OR**
- ☐ the requisite fee under 37 C.F.R. 1.17(p), namely **\$180.00**, is included herein, or

- ☐ (3) after the mailing date of a **final action** or **notice of allowance** but before the payment of the **issue fee**, **AND**
- ☐ the requisite Statement is below, **AND**
- ☐ the requisite petition fee under 37 C.F.R. 1.17(p), namely **\$180.00** is included herein.

It is respectfully requested that each of the patents and publications listed on the attached Form PTO-1449, and other information contained herein, be made of record in this application.

STATEMENT

As required under 37 C.F.R. 1.97(e), Applicant(s), through the undersigned, hereby state either that **[check the appropriate space only if either (2) or (3) is checked on the previous page and the Statement is required]**:


- ☐ 1. Each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application **not more than three months** prior to the filing of the Information Disclosure Statement; or
- ☐ 2. No item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this Statement after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to **any individual** designated in 37 C.F.R. 1.56(c) **more than three months** prior to the filing of the Information Disclosure Statement.

Respectfully submitted,

Date: February 10, 2004
Reg. No. 36,471

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EQ 001 PTO - 1449 INFORMATION DISCLOSURE STATEMENT					ATTORNEY DOCKET NO.: CNF-007 APPLICANTS: Fike et al. SERIAL NO.: 10/666,914 FILING DATE: September 19, 2003 GROUP: 2874				
U.S. PATENT DOCUMENTS									
EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE		
	A1	5,354,709	10/11/1994	Lorenzo et al.					
	A2	5,838,870	11/17/1998	Soref					
	A3	6,108,478	08/22/2000	Harpin et al.					
FOREIGN PATENT DOCUMENTS									
EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)
	B1	JP 04179905	06/26/92					N	N (English language abstract)
OTHER ART, JOURNAL ARTICLES, ETC.									
EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)								
	C1	"Silicon Antiresonant Reflecting Optical Waveguides," R. A. Soref and K. J. Ritter, <i>Optics Letters</i> , Vol. 15 No. 14, 1990, 792-794.							
	C2	"Silicon-Based Optoelectronics," R. A. Soref, <i>Proceedings of the IEEE</i> , 81, December 1993, 1687-1706.							
	C3	"Hybrid Optical Integration Technology," M. Kobayashi and K. Kato, <i>Electronics and Communications in Japan, Part 2</i> , Vol. 77 No. 10, 1994, 67-81.							
	C4	"WP 4.2: Silicon-Based Photonic Devices," R. A. Soref, <i>IEEE International Solid State Circuits Conference</i> , 38, 1995, 66-67.							
	C5	"One-Level Gray-Tone Lithography-Mask Data Preparation and Pattern Transfer," K. Reimer, H. J. Quenzer, R. Demmeler, B. Wagner, <i>SPIE</i> , 2783, 1996, 71-79.							
	C6	"Small Radius Bends and Large Angle Splitters in SOI Waveguides," J. S. Foresi, D. R. Lim, L. Liao, A. M. Agarwal, L. C. Kimerling, M. Tavassoli, M. Cox, M. Cao, and W. Greene, <i>SPIE</i> , 3007, 1997, 112-118.							
	C7	"Telecom Optical Componentry: Past, Present, Future," L. Eldada, <i>Proceedings of the SPIE</i> , 4604, 2001, 1-15.							
	C8	"Fabrication of Silicon-on-Insulator Adiabatic Tapers for Low Loss Optical Interconnection of Photonic Devices," J. J. Fijol, E. E. Fike, P. B. Keating, D. Gilbody, J. LeBlanc, S. A. Jacobson, W. J. Kessler, and M. B. Frish, <i>IEEE Photonics West Conference</i> , 2003, 1-14.							
EXAMINER					DATE CONSIDERED				



FORM PTO - 1449		ATTORNEY DOCKET NO.: CNF-007
INFORMATION DISCLOSURE STATEMENT		APPLICANTS: Fike et al.
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OTHER ART, JOURNAL ARTICLES, ETC.		
EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)	
	C9	"Optical Interconnection Using Fiber Arrays and Planar Waveguide Arrays," P. B. Keating, E. E. Fike, J. J. Fijol, and D. Gilbody, <i>Advancing Microelectronics</i> , July/August 2003, 14-17.
	C10	PCT/US02/18463 International Search Report August 21, 2003 (5 pages)
EXAMINER		DATE CONSIDERED

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